General Remarks

Claim Rejections 35 USC § 112

Applicant requests reconsideration and withdrawal of this objection with the deletions of Claims 1-12 and additions of Claim 13-26. Applicant believes the new claims define the focus and distinctly on the subject matter, invention and are in proper format.

Claim Rejections 35 USC § 101

Applicant requests reconsideration and withdrawal of this objection with the deletions of Claims 5-8 references claiming a human being within its scope have been removed.

Claim Rejections 35 USC § 103(a)

The referenced Office Action states that prior art centers on the teaching by Kane (US Pat. 6,317,728). Kane's teachings and patent differs fundamentally from Applicant's patent disclosure.

On Page 15, lines 7-10 Kane describes his invention, "The invention is a mechanized, fully automated securities trading system that incorporates decision making, execution and learning capabilities. The system engages in automated decision making to acquire and sell securities positions via processing logic." Kane's invention tries to emulate the human trader and be smarter, enduring, and more efficient.

In order to execute Kane's invention, his invention requires: "Intelligent Agents" (Page 15 lines 40-48); "Certainty" using an Artificial Intelligence (AI) engine (page 15 lines 48-58); Voting (page 15 lines 59-64); various information sources, constant link and monitoring of the exchange market.

Applicant's invention does not attempt to provide trading information, recommendations, or decision making. Furthermore, Applicant's invention does not require broad information inputs, constant monitoring, Artificial Intelligence or complex voting logic

information to function. Applicant's invention stands ready and executed a specified set of instructions determined by the investor and does not deviate from its basic function of predetermined stock trading execution.

Kane's inventor solves a different problem, seeks different outcomes, requires different inputs, and develops different outputs.

Kane's invention using automated intelligent systems to buy and sell is questionable if they will ever be allowed in stock exchange systems. Such a system could cause an investor to loose everything without human authorization.

- 1. Kane teaches a means for online trading which requires the user's computer to be online throughout the time it is operating under the guidance of that patent. Applicant teaches a totally different concept which does not require the user's computer to be online except for a brief time when it provides the commands to the broker.
- 2. Kane requires the use of "artificial intelligence in that the decision agents are rewarded in a feedback arrangement by being given added or reduced voting power when their recommendations are found to result in successful or unsuccessful decisions" (verbiage is from the abstract). No such requirement is discussed in Applicant's specifications or disclosure since the use of artificial intelligence this is a fundamental conceptual and implementational difference of prior art. Applicant teaches that all decisions are made the investor and that Kane's decision aides or artificial intelligence address a different problem.
- 3. Kane's invention relies upon having a "self learning feature" "which results in improving the performance of the system as the number of transactions increases". The Applicant's invention needs no such "self-learning feature" to function. Again, this is a fundamental conceptual and implementational difference.

- 4. Kane claims a system "comprising a data acquisition system having an input communicating with a securities exchange" (Claim 1). Applicant claims no data acquisition system since Applicant's invention does not look at market data prior to an execution order and does not require communications with a securities exchange broker prior to placing an orders.
- 5. Kane claims (Claim 1) "a processing logic having inputs" And needs that to function. Applicant needs no such inputs and no processing logic to act on them. Again, this is fundamental difference between applicant and prior art.
- 6. Kane claims (Claims 7a, 7b,7c) extensive interaction with "all agents", "issuing to all agents tentative buy/short/sell long orders" (claim 7a), "soliciting from all agents" (claim 7b), having a "decision logic" that "affirms" "if a majority of the agents have indicated"... etc. Applicant's invention does not require any of these elements which are essential to the teachings and implementation of Kane's invention. Applicant's invention does not require agents, "decision logic", or a "majority of agents indicating".
- 7. Kane claims (in claim 8d) requiring a "feedback system" and "artificial intelligence" and "agents" with "voting power" and "recommendations of the respective agents" (claim 8d) to function. Applicant's invention does not require any of these elements which are required by Kane. This is a fundamental difference in concept and in implementation that cannot be derived from the prior art (Kane). Applicant's invention is a fundamentally different invention.

Kane's invention is dependent upon the continuous operation of a feedback loop and communication path to the user's computer, whereas the Applicant's invention is an open loop system that requires no feedback and no communications path back to the user's computer once the orders have been placed.

8. Kane teaches an invention that is understood to include "a computer arrangement communicating with a securities exchange and has inputs for receiving buy and sell

data". (first four lines of the Description of the Kane's patent). Applicant's invention does not disclose or requires any of these elements. It does not require communicating with a securities exchange except to place orders.

- 9. Kane's invention requires the performance of a "careful, tireless monitoring". Applicant's inventor requires no such monitoring, tireless or otherwise.
- 10. The Summary of Kane's Invention states clearly in the 4th paragraph that "By monitoring one's stock holdings continuously during the day and watching trends, the system will limit one's losses".

By contrast, Applicant's invention requires no need for the user to monitor one's stock holdings continuously during the day and watching trends" at all. This is a fundamental difference in concept and in essence.

- 11. Kane's Summary of the Invention (paragraph 8) states that "the system lets one ... monitor stocks continuously". This is fundamentally different from the Applicant's invention which requires no monitoring of the stocks by the user.
- 12. Kane's same Summary of the Invention teaches a system which "the decision logic [which] includes at least one agent being responsive to one of the buy/sell rules, one agent being operative for generating a buy/sell order", "a plurality of agents each operating in response to a dedicated one of the buys/sell rules and wherein each of the agents has a buy/sell data conforming to the buy/sell rule". These elements are taught by Kane and are required for operation of Kane's invention. None of these elements are required for Applicant's invention since Applicant solves a different problem.
- 13. In Kane's "Preferred Embodiment", he teaches hardware and software components, agents, "ticker-tape data", a "ticker tape monitor 18", data retention hardware, "data monitor and Record Change Unity 24" etc. By contrast, Applicant's invention is fundamentally different in concept and in essence and requires no software or hardware

components, no ticker-tape data, no ticker tape monitor, no data retention hardware, nor data monitor, etc.

- 14. Kane discusses "200 Intelligent Agents currently in the system" that "contain rules and logic which evaluate market and specific equity behaviors". Applicant's invention has no "agents", and does not burden the user with monitoring any "market and specific equity behaviors". This task is performed by the broker and the user has none of these requirements.
- 15. Kane teaches his "Wealth Builder" "can be plugged directly into a broker's or specialists wide area network or hooked directly via dedicated lines to command trades and retrieve brokerage information".

By contrast, Applicant's invention neither requires nor engages into any of these tasks; it merely issues open-loop commands to one's broker.

- 16. Kane's preferred embodiment discusses at great length the essence of his invention which has "long and short agents", agents being "rewarded or punished", "accuracy levels of agents", "marginalizing agents", "learn mode", "intelligent agents", "monitoring a portfolio of securities in real time (item 5), "recording trade data and account history", "carry forward the learning", etc. None of these elements, which are integral to Kane's invention exist or are needed (nor even desired) in Applicant's invention because the Applicant's invention is fundamentally different in concept, in essence and in implementation.
- 17. Kane's invention requires a "program", "program startup" (item 13), "learning from failure" (Fig. 17), "self-learning", "LeMarck" and "Darwin" algorithms. etc. None of these elements exist in concept, in function, or in any form whatever in the Applicant's invention because it is fundamentally different in that it teaches a totally different approach that requires no "program", no "agents" (intelligent or otherwise), no "learning", and no monitoring of the stock market.

General Discussion

As discussed above in general terms and in specific points 1-17, Kane's inventor solves a different problem, seeks different outcomes, requires different inputs, and develops different outputs. Kane's inventor has physical differences and operational differences.

Physical Differences

Applicant's invention uses a computer to input the stock trading commands to an online trading firm and the firm can execute the commands since the command sequence is predetermined. Applicant's invention does not require the input computer to watch stock trading events. Applicant's invention does not contain AI modules, decision making logic, learning systems, or independent trading capabilities.

Operational Differences

Applicant's invention is based on a fixed set of commands entered by the investor. In the Applicant's invention the investor sets the decision sequence not the computer. The Applicant's invention does not require constant monitoring of the stock market and the control and responsibility for all decision is clearly with the investor.

Kane's invention relies on complex AI and rules and places the control and responsibility for all decisions on the computer. Kane's computers can learn and make decisions and Kane appears to make the assumption that a computer's performance is superior to human trading decisions. The security and exchange market has proven to be very complex and many computers have tried to develop rules and patterns to gain a significant edge yet the market has proven its robustness, randomness, and unpredictability where by humans dominate. Computers such as Kane's invention have not proven to be more effective than the human trader. Applicant's invention is a tool for the human trader to apply his logic to better execute trades in a timely manner by linking buy and sell order in a sequence to minimize new order trading time and take advantage of the market's minute-by minute movements.

Applicant requests reconsideration and withdrawal of this objection since there are major physical and operational differences when comparing Kane's specifications and claims with those of the Applicant's.

Conclusion

By the above amendment, Applicant has rewritten claims to define the invention more particularly and distinctly so as to overcome the technical rejections and to define the invention patentably over prior art. Applicant's device is novel and unique in configuration, operation, and application. The other referenced patents alone or in combination cannot perform this function due to their respective uniqueness.

Conditional Request For Constructive Assistance

Applicant has amended the claims of this Application so that they are proper, definite, and define novel structures. If, after review, this Application does not meet the allowance standards, Applicant respectfully requests the constructive assistance and suggestions of the Examiner pursuant to M.P.E.P. S 2173.02 and S 707.07(j) so the undersigned may modify this Application to meet said standards as soon as possible while foregoing the need for further proceedings.

Very Respectfully,

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